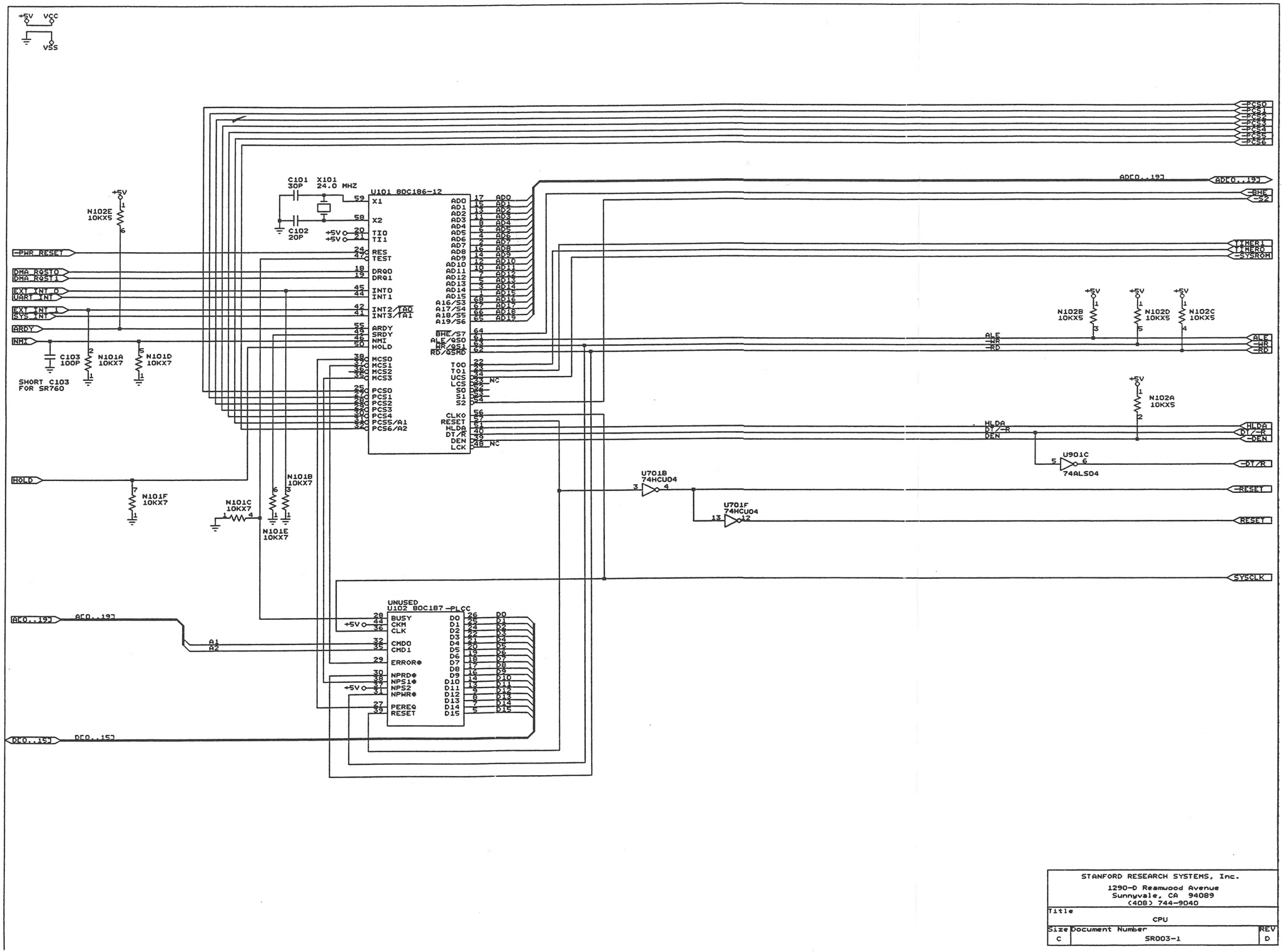
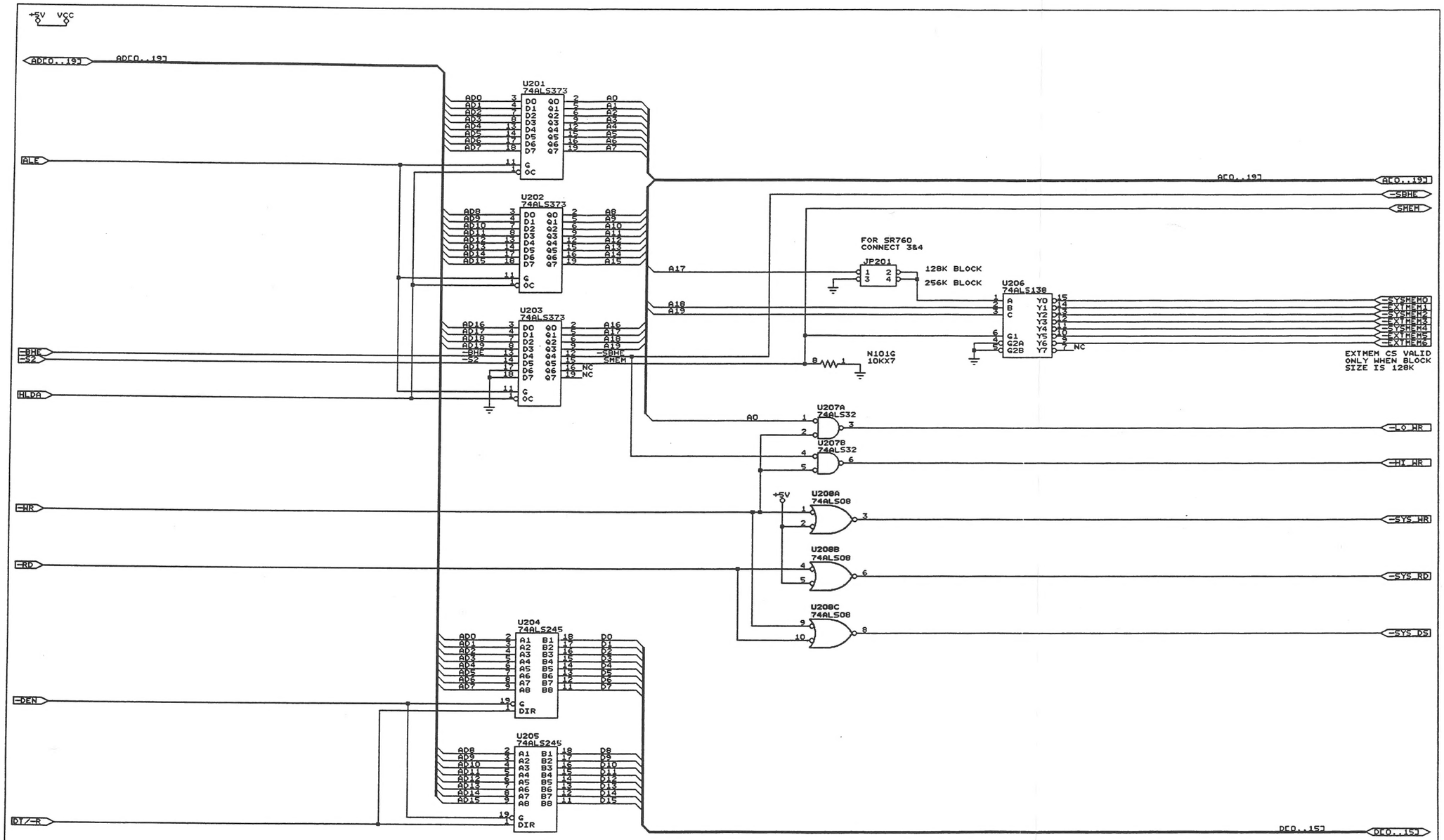


STANFORD RESEARCH SYSTEMS, Inc.	
1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040	
Title	CPU
Size: C	Document Number: SR003-1
REV: D	



STANFORD RESEARCH SYSTEMS, Inc.		
1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040		
Title: ADDRESS AND DATA BUFFERS		
Size: C	Document Number: SR003-2	REV: D

SYSTEM BOOT ROM (256K BYTES OR 128K BYTES)

U301, U302 USE
27C010-100 (128KX8)

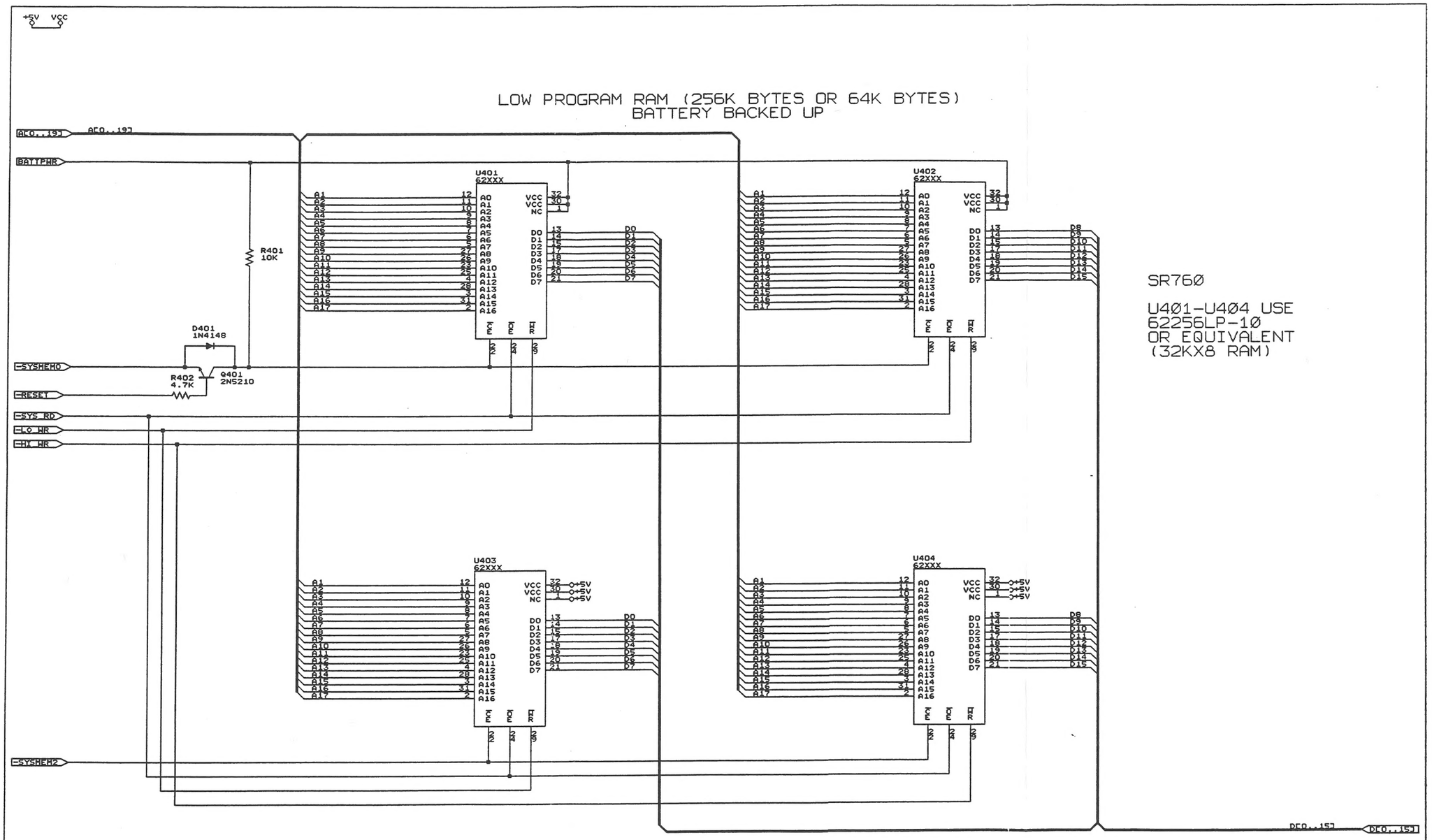
U303, U304 USE
27C512-100 (64KX8)

FOR SR760

	CONNECT PINS
JP301	3&4 5&6
JP302	1&2 5&6 11&12 13&14 19&20
JP303	1&2

STANFORD RESEARCH SYSTEMS, Inc. 1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040		
Title: SYSTEM ROM		
Size: C	Document Number: SR003-3	REV: D

LOW PROGRAM RAM (256K BYTES OR 64K BYTES) BATTERY BACKED UP



SR760

U401-U404 USE 62256LP-10 OR EQUIVALENT (32KX8 RAM)

PROGRAM RAM (256K BYTES OR 64K BYTES)

STANFORD RESEARCH SYSTEMS, Inc.
1290-D Reamwood Avenue
Sunnyvale, CA 94089
(408) 744-9040

Title		
SYSTEM RAM		
Size	Document Number	REV
C	SR003-4	D

+5V VCC

A[0..19] A[0..19]

SYSTEM PORT DECODE
8 BLOCKS OF 16 LOCATIONS

U501
74ALS138
A4, A5, A6 → A, B, C
-PCS0, -WR → G1, G2A, G2B
+5V → G1
Y0 -RTCADR_WR
Y1 -RTC_WR
Y2 -SYSLED_WR
Y3 -KEYPAD_WR
Y4 -SPORT_WR
Y5 -PRINT_WR
Y6 -EXT_WR_0
Y7 -EXT_WR_1

U502
74ALS138
A4, A5, A6 → A, B, C
-RD → G2B
-PCS0 → G2A
+5V → G1
Y0 -KNOB_RD
Y1 -RTC_RD
Y2 -KEYBD_RD
Y3 -KEYPAD_RD
Y4 -STAT_RD
Y5 -EXT_RD_0
Y6 -EXT_RD_1
Y7 -EXT_RD_2

U503
74ALS138
A4, A5, A6 → A, B, C
ALE, -PCS1 → G2A, G2B
+5V → G1
Y0 -FDC_SEL
Y1 -FDC_DACK
Y2 -GPIB_SEL
Y3 -VIDEO_DAK
Y4 -EXT_CS_0
Y5 -EXT_CS_1
Y6 -EXT_CS_2
Y7 -EXT_CS_3

-EXT_CS_3 MAY NOT BE USED IF THE DEBUG UART IS IN

U207C
74ALS32
-SYS_DS, -PCS2 → 9, 10
8 -UART_SEL

U207D
74ALS32
-PCS3, -VIDEO_SEL → 12, 13
11 -VIDEO_SEL

-RESET
-VIDEO_RDY

U805A
74HC10
-RESET, -VIDEO_RDY → 1, 2
12

U815D
+5V → 12, 13
11
74HC86

-VIDEO_ACK

U815C
-VIDEO_SEL, -VIDEO_DAK → 9, 10
8
74HC86

VIDEO_CS

C501
20P

U504A
74HCT74
D, CK, PR, CL
Q, Q̄
+5V

U208D
74ALS08
-VIDEO_WAIT, -EXT_WAIT → 12, 13
11 -WAIT
-WAIT → ARDY

-EXT_WAIT R502 10K +5V

EXT_ARDY

+5V
N501B 10KX5
N501C 10KX5
N501D 10KX5
N501E 10KX5
N501A 10KX5

LOWEST PRIORITY
-RTC_INT
-KYBD_INT
-PRN_INT
-KNOB_INT
-FDC_INT
-GPIB_INT
-EXT_INT_2
-VIDEO_INT
HIGHEST PRIORITY
-STAT_RD

U506
74HCT373
D0 D1 D2 D3 D4 D5 D6 D7
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7
G, OC

SYSTEM INTERRUPT PRIORITY ENCODER

U505
74LS148
0 1 2 3 4 5 6 7
A0 A1 A2 GS EO EI
14 NC
15
SYSVECT0
SYSVECT1
SYSVECT2
SYS_INT

STANFORD RESEARCH SYSTEMS, Inc. 1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040		
Title: SYSTEM DECODE		
Size: C	Document Number: SR003-5	REV: D

DF0..15

IBM SERIAL KEYBOARD
KEYBD INPUT ONLY

JP601
DIN5
GND
+5V
KCLK
KDAT
KRST

-RESET
-KEYBD RD

R601 10K
R602 10K
C601 47U-E16
C602 330P
C603 330P

U601A 74HCT74
U601B 74HCT74
U612A 74HC14
U701C 74HCU04

-KYBD_INT

U603 74HC595
SER
SRCLK
SRCLR
RCLK
QA QB QC QD QE QF QG QH QH'

N601A 22KX9 SPARE
N601B 22KX9
N601C 22KX9
N601D 22KX9
N601E 22KX9
N601F 22KX9
N601G 22KX9
N601H 22KX9
N601I 22KX9

KEYCOL0
KEYCOL1
KEYCOL2
KEYCOL3
KEYCOL4
KEYCOL5
KEYCOL6
KEYCOL7
KEYCOL[0..7]

U606 74HCT244

U607 74HCT374
CLK
OC

D601 D605
D602 D606
D603 D607
D604 D608
1N4148

FRONT PANEL CONNECTOR
KEYPAD & KNOB
JP602
HEADER15X2

KEYROW0
KEYROW1
KEYROW2
KEYROW3
KEYROW4
KEYROW5
KEYROW6
KEYROW7
KNOB_A
KNOB_B

-KEYPAD RD
-KEYPAD WR

U608 74HCT244
SYSVECT0
SYSVECT1
SYSVECT2
50/-60
-PRN BUSY
PRN ERROR
KNOBA
KNOBB

U609 74HCT374
-PRN STRB
PRN/-INIT
PRNINT EN
SPKR EN
DMA SELECT
SPARE
SPARE
SPARE

JUMPER FOR
50/60 HZ OPERATION
JP603

-STAT RD
-SPORT WR

U610A 74HCT74
U610B 74HCT74
U611A 74HCT74
U611B 74HCT74
U612B 74HC14
U612C 74HC14
U612D 74HC14
U612E 74HC14
U602A 74HC20
U612F 74HC14

-KNOB_INT
-KNOB RD

STANFORD RESEARCH SYSTEMS, Inc.
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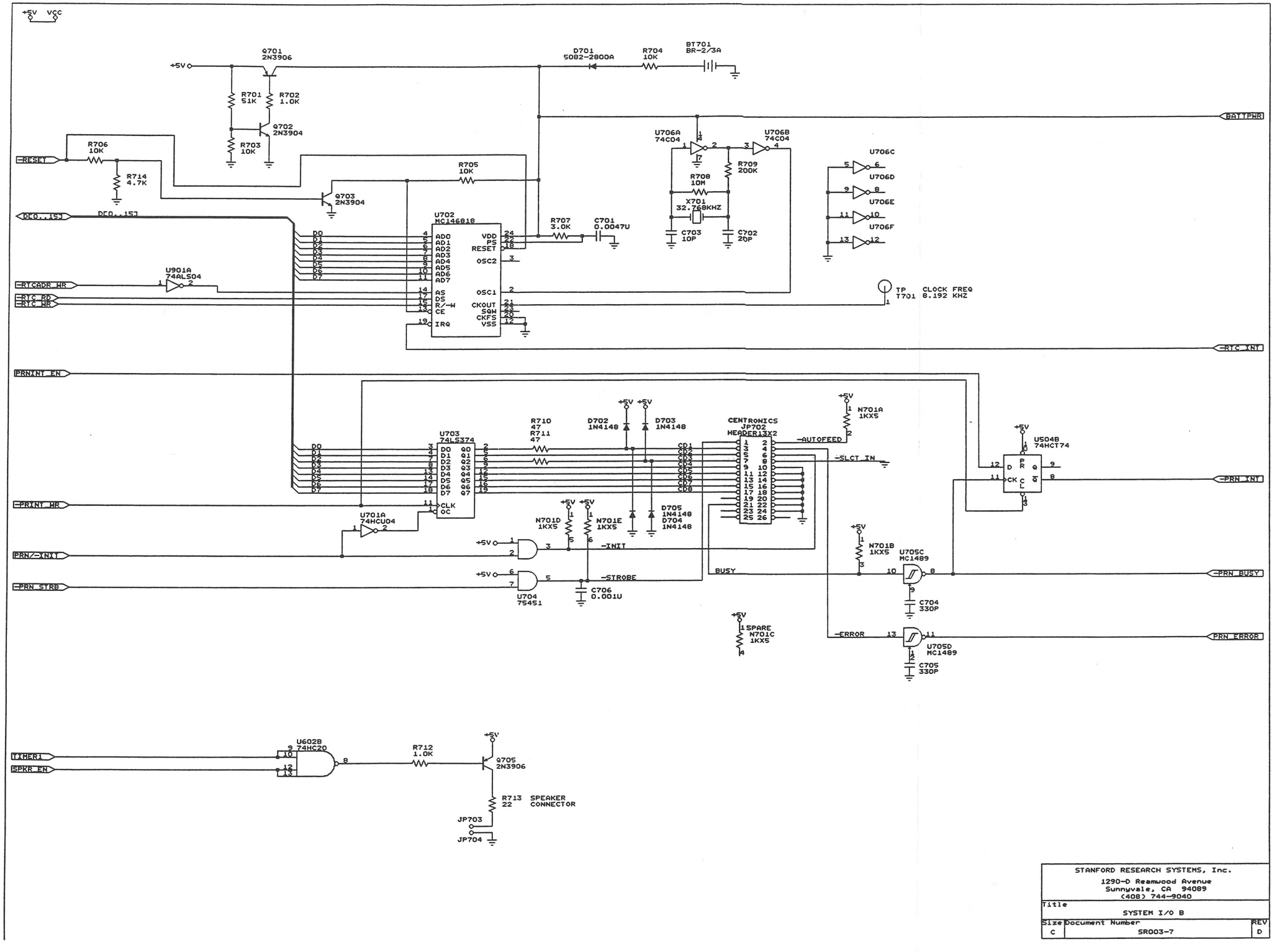
Title: SYSTEM I/O A
Size: C
Document Number: SR003-6
REV: D



STANFORD RESEARCH SYSTEMS, Inc.		
1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040		
Title	SYSTEM I/O B	
Size C	Document Number SR003-7	REV D

C803 2.2U
C804 2.2U
C805 2.2U
C806 2.2U
C807 2.2U
C808 2.2U

R801 1.0M
U801A 74HCU04
U801F 74HCU04
R802 270
X801 13.5168MHZ
C801 62P
C802 62P
DOT_CLK

U802 74HCT191
LOAD
MX/MN
D/U
U803A 74HC11
VLOAD

U808 74HCT164
U806B 74HCT74
U807A 74HCT74
U803C 74HC11
VIDEO_DOT
DISP_EN
SELECT FOR CONTRAST
R808 240
R809 470
VIDEO

U804 74HCT299
U809 74HCT299
GD0..GD15

U807B 74HCT74
U901F 74ALS04
-AS
-MCYC
U803B 74HC11
VLD/-DMY
-DRAW
MCYC

U810 HD63484
2CLK
LPSTB
DONE
DREQ
DACK
DTACK
RES
IRQ
R/-W
CS
RS
VSYNC
HSYNC
DISP1
DISP2
CUD1
CUD2
EXSYNC
CHR
MRD
DRAW
MCYC
AS
MAD0..MAD15
MAD16/RA0
MAD17/RA1
MAD18/RA2
MAD19/RA3
RA4
A2
A1
AFD..19
-VIDEO SEL
DFD..15

N801E 10KX5
N801C 10KX5
N801D 10KX5
-VIDEO DAK
-RESET

U801B 74HCU04
U801C 74HCU04
U801D 74HCU04
U801E 74HCU04
U805B 74HC10
U805C 74HC10

U811 74HCT374
U812 74HCT374
GAD0..14
U813 62256
U814 62256

N801A 10KX5
N801B 10KX5
U815A 74HC86
U815B 74HC86
JP802 HEADER2X2 SYNC POLARITY

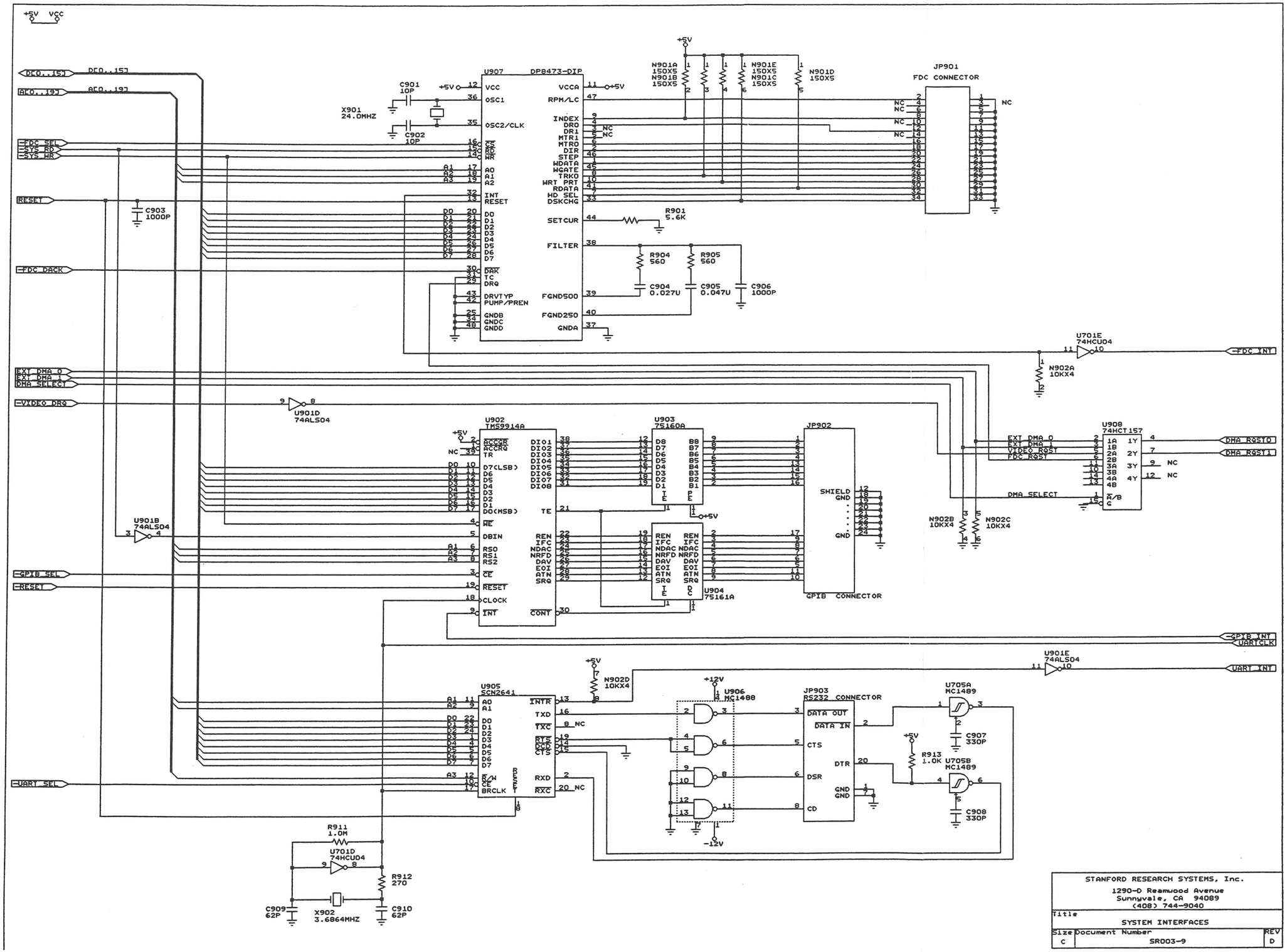
-VIDEO INT
-VIDEO RDY
-VIDEO DRQ

BRIGHTNESS POT CONNECTOR
JP803 HEADER3
ORANGE J3 PAD
WHITE J2 PAD
J1 RED PAD
BRT LOW
BRT MID
BRT HI

VIDEO CONNECTOR JP801 HEADER10X2
VGND
HSYNC
VIDEO
VSYNC
VGND

SPARE
U806A 74HCT74

STANFORD RESEARCH SYSTEMS, Inc.		
1290-D Reamwood Avenue Sunnyvale, CA 94089 (408) 744-9040		
Title: VIDEO GRAPHICS INTERFACE		
Size: C	Document Number: SR003-8	REV: D


+5V VCC
DFO..15J
AFO..19J
FDC SEL
SYS RD
SYS WR
RESET
-FDC DACK
EXT DMA 0
EXT DMA 1
DMA SELECT
-VIDEO DRQ
-UART SEL
-GPIB SEL
-RESET
U907 DP8473-DIP
VCC
OSC1
OSC2/CLK
VCCA
RPM/LC
INDEX
DRQ
DR1
MTR1
MTR0
DIR
STEP
WDATA
WGATE
TRK0
WRT PRT
RDATA
HD SEL
DSKCHG
SETCUR
FILTER
FGND500
FGND250
GNDA
INT
RESET
DAK
TC
DRQ
DRVTYP
PUMP/PREN
GNDB
GNDC
GNDD
C901 10P
X901 24.0MHZ
C902 10P
C903 1000P
R901 5.6K
R904 560
R905 560
C904 0.027U
C905 0.047U
C906 1000P
N901A 150X5
N901B 150X5
N901C 150X5
N901D 150X5
N901E 150X5
JP901 FDC CONNECTOR
U701E 74HCU04
N902A 10KX4
-FDC INT
U901D 74ALS04
U902 TMS9914A
U903 75160A
U904 75161A
JP902
SHIELD
GND
GPIB CONNECTOR
U908 74HCT157
DMA RQST0
DMA RQST1
N902B 10KX4
N902C 10KX4
U901B 74ALS04
-GPIB INT
UARTCLK
U901E 74ALS04
-UART INT
U905 SCN2641
INTR
TXD
TXC
RTS
DCD
CTS
RXD
RXC
N902D 10KX4
U906 MC1488
JP903 RS232 CONNECTOR
DATA OUT
DATA IN
CTS
DSR
GND
CD
DTR
U705A MC1489
U705B MC1489
R913 1.0K
C907 330P
C908 330P
R911 1.0M
U701D 74HCU04
R912 270
C909 62P
X902 3.6864MHZ
C910 62P
STANFORD RESEARCH SYSTEMS, Inc.
1290-D Reamwood Avenue
Sunnyvale, CA 94089
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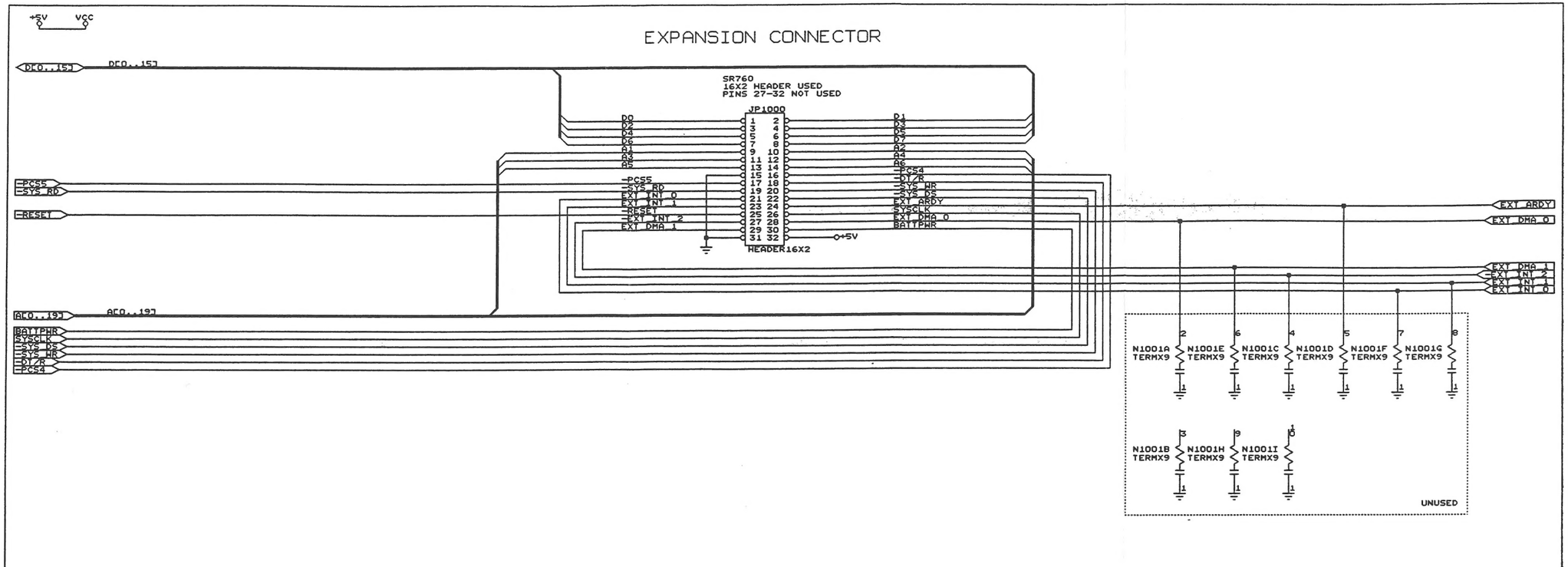
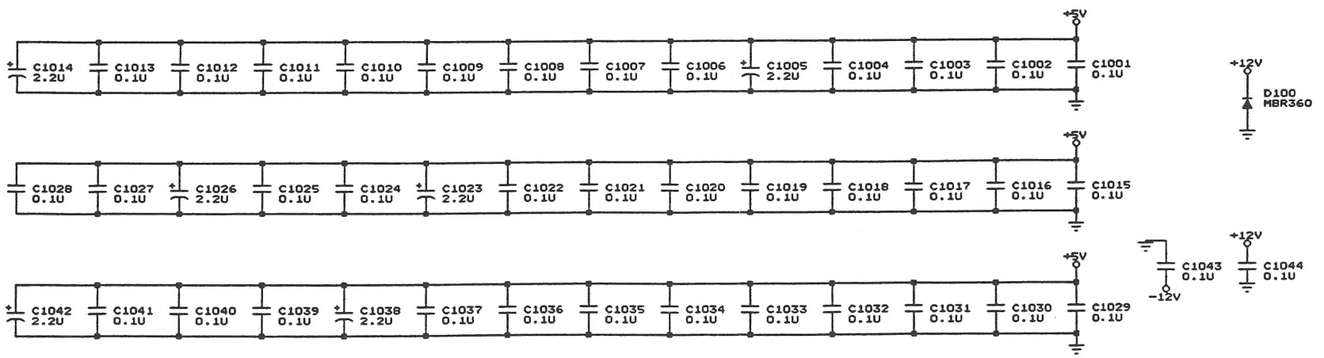
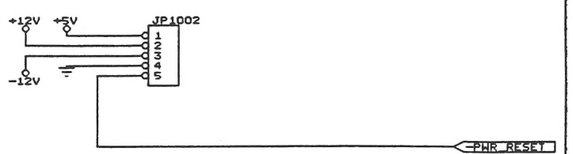
Title
SYSTEM INTERFACES
Size C
Document Number SR003-9
REV D

EXPANSION CONNECTOR

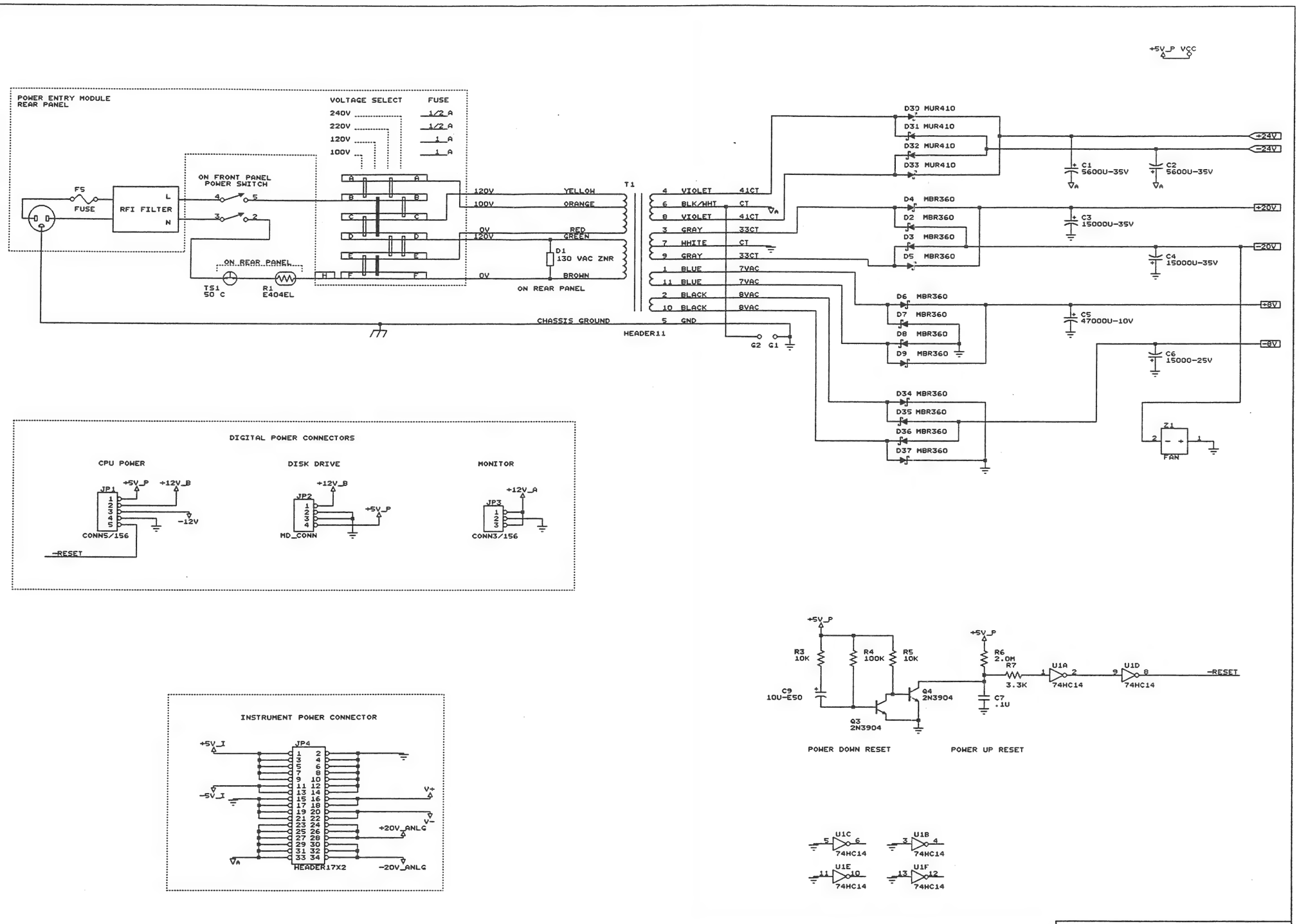




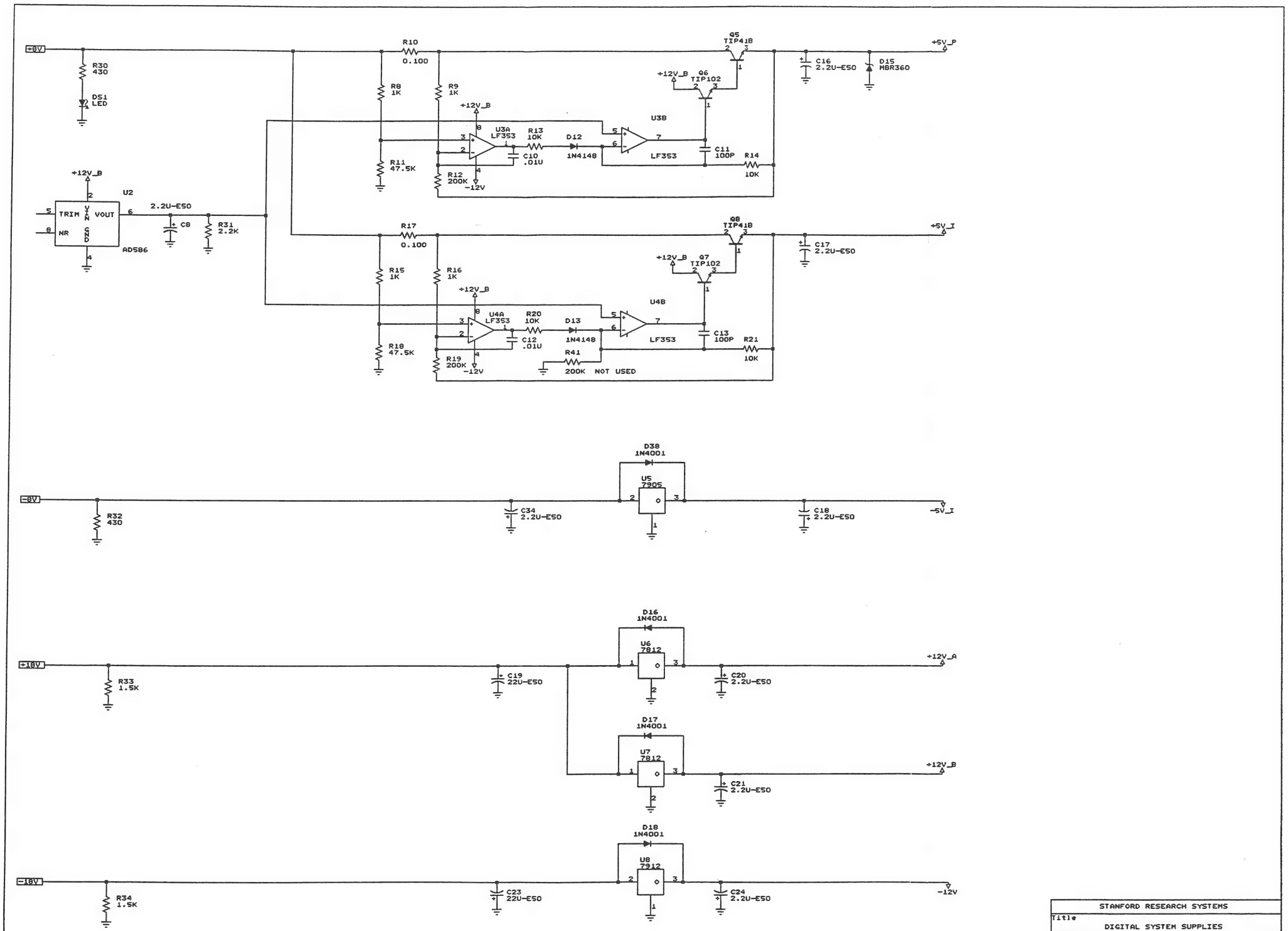
POWER CONNECTOR



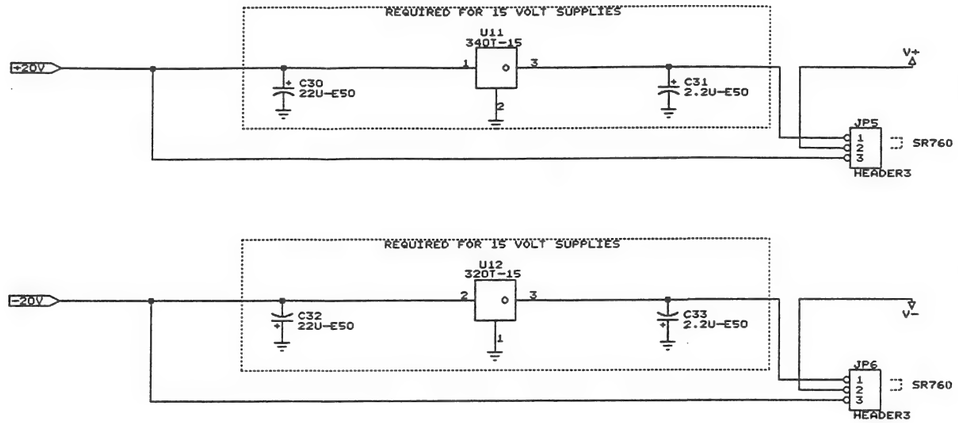
STANFORD RESEARCH SYSTEMS, Inc. 1290 D Reamwood Ave. Sunnyvale, CA 94089 (408)744-9040	
Title: SYSTEM INTERCONNECT	
Size: C	Document Number: SR003-10 — REV: D



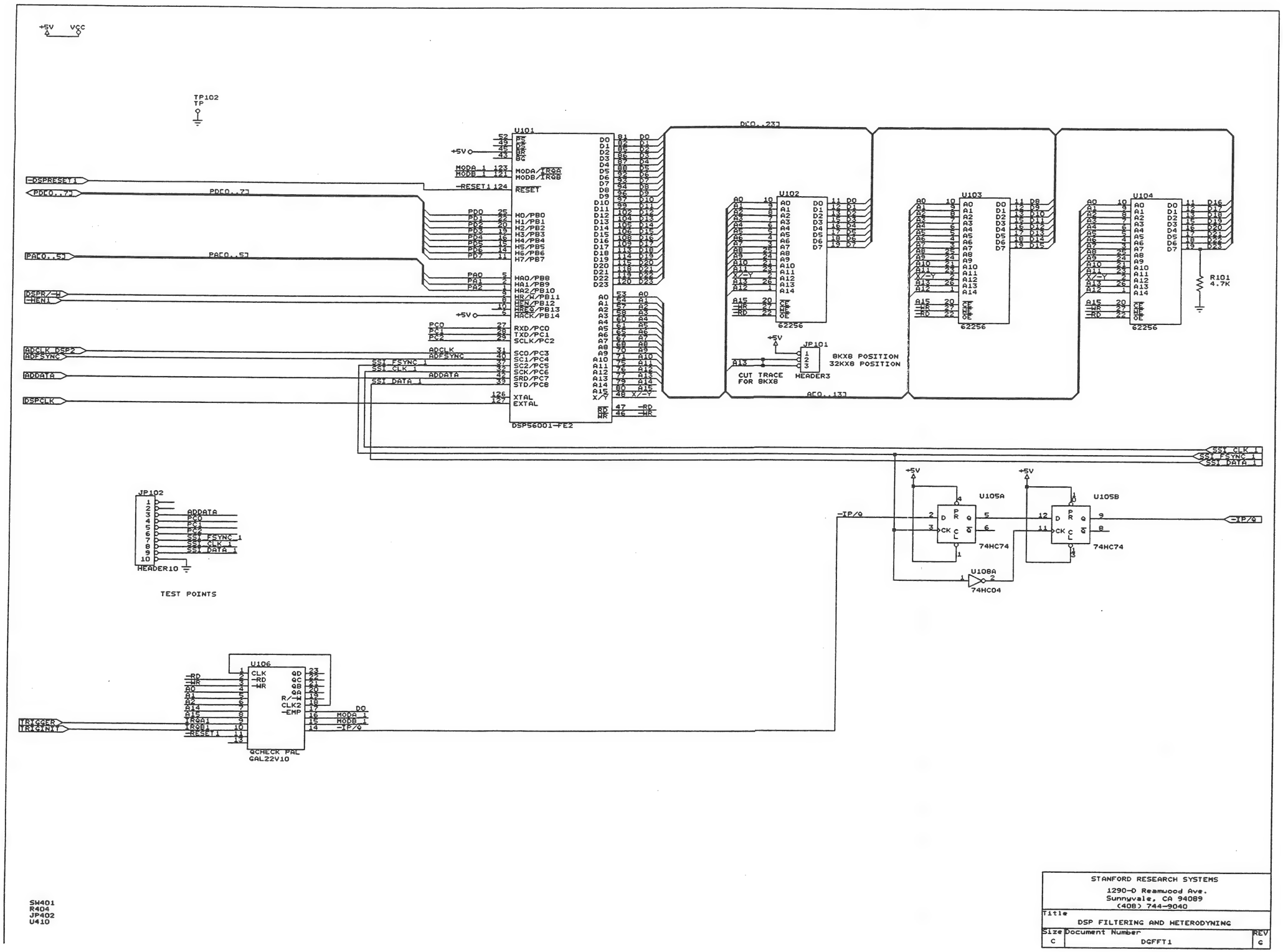
STANFORD RESEARCH SYSTEMS		
Title: UNREGULATED SUPPLIES		
Size: C	Document Number: SR004-1	REV: E

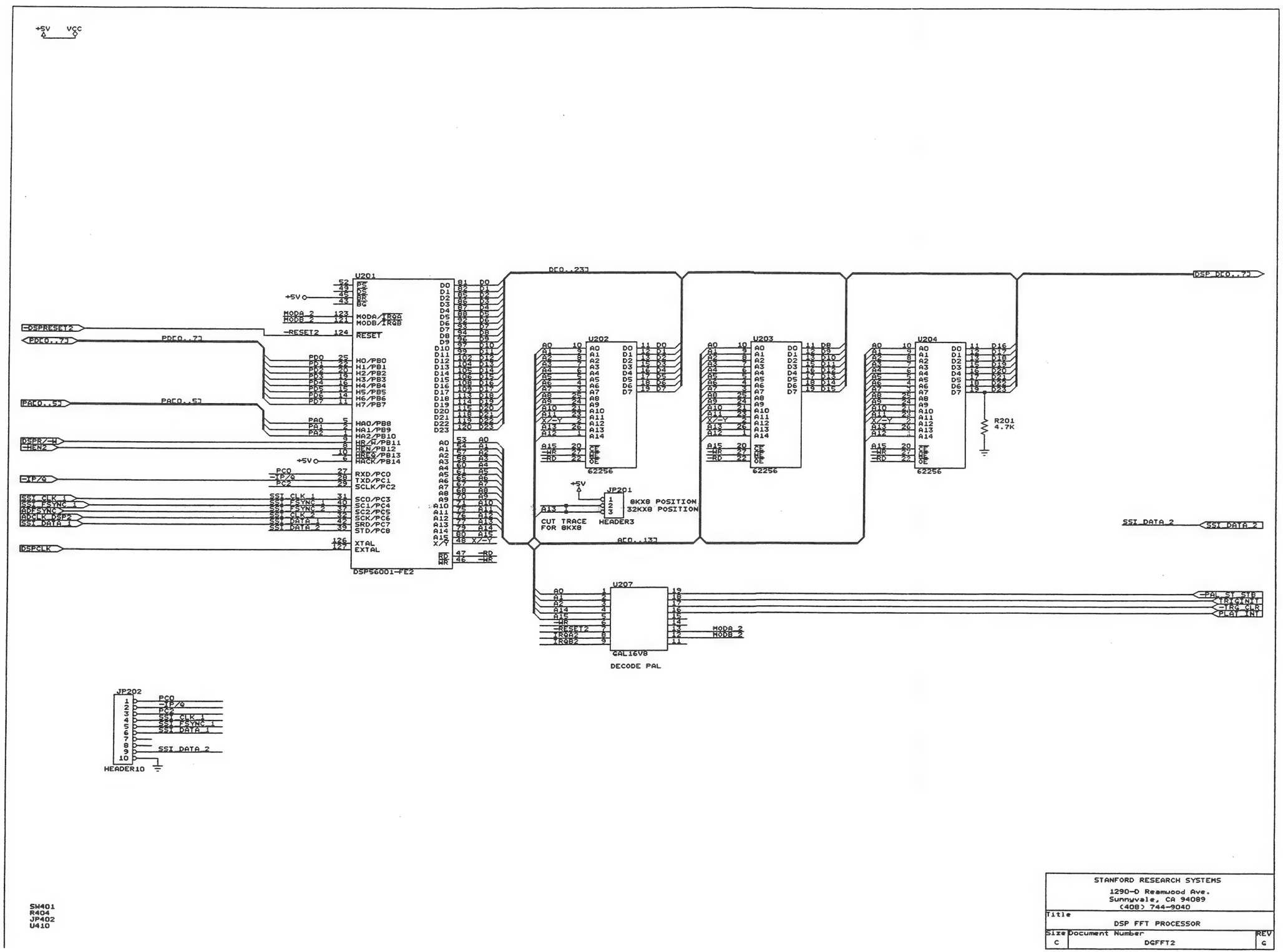


STANFORD RESEARCH SYSTEMS		
Title: DIGITAL SYSTEM SUPPLIES		
Size: C	Document Number: SR004-2	REV: E



STANFORD RESEARCH SYSTEMS		
Title: ANALOG SUPPLIES		
Size: C	Document Number: SR004-3	REV: E


+5V
VCC
TP102
TP
U101
DSP56001-FE2
-DSPRESET1
PD[0..7]
PA[0..5]
DSPR/-W
-HEN1
ADCLK_DSP2
ADFSYNC
ADDATA
DSPCLK
SSI_FSYNC_1
SSI_CLK_1
SSI_DATA_1
-RESET1
MODA_1
MODB_1
D[0..23]
A[0..13]
U102
U103
U104
62256
R101
4.7K
JP101
8KX8 POSITION
32KX8 POSITION
CUT TRACE
FOR 8KX8
HEADER3
JP102
HEADER10
TEST POINTS
U105A
U105B
74HC74
U108A
74HC04
-IP/Q
U106
GCHECK PAL
GAL22V10
TRIGGER
TRIGINIT
DO
SW401
R404
JP402
U410
STANFORD RESEARCH SYSTEMS
1290-D Reamwood Ave.
Sunnyvale, CA 94089
(408) 744-9040
Title
DSP FILTERING AND HETERODYNING
Size
C
Document Number
DGFFT1
REV
G


+5V
VCC
U201
DSP56001-FE2
-DSPRESET2
PDF0..7]
PAF0..5]
DSPR/-W
-HEN2
-IP/0
DSPCLK
SSI_CLK_1
SSI_FSYNC_1
ADFSYNC
ADCLK_DSP2
SSI_DATA_1
SSI_DATA_2
MODA_2
MODB_2
-RESET2
PCO
PC2
-RD
-WR
PDF0..23]
AF0..13]
U202
U203
U204
62256
JP201
8KX8 POSITION
32KX8 POSITION
CUT TRACE FOR 8KX8
HEADER3
A13
DSP_PD0..7]
R201
4.7K
SSI_DATA_2
U207
GAL16V8
DECODE PAL
-PAL_ST_STB
-TRX0_INT
-TR0_CLR
PLAY_INT
MODA_2
MODB_2
JP202
HEADER10
SW401
R404
JP402
U410
STANFORD RESEARCH SYSTEMS
1290-D Reamwood Ave.
Sunnyvale, CA 94089
(408) 744-9040
Title
DSP FFT PROCESSOR
Size
C
Document Number
DGFFT2
REV
G

-RISE/FALL
C306 100P
N301D 1KX4I
REF IN
J301 RCA
K301A HS-212
T301 T1-1
COMMON-MODE TRANSFORMER
K302A
HS-212
R301 10K
R302 10K
U301A OPA2604
TP301 TP
N301A 1KX4I
+5V
D301 1N4148
D302 1N4148
-5V
U303A LT1016
TP302 TP
K302B -TTL_REF
HS-212
R305 10K
U302B
74F86
+5V
U304A
74F74
ANYRG
ANYRG_GND
C301 100P
N301C 1KX4I
U301B OPA2604
R303 10K
U302A
74F86
R304 100K
N301B 1KX4I
-EXT/EXT_TRG
Q301 2N3906
K301C HS-212
-TTL/ANA_TRG
Q302 2N3906
K302C HS-212
TRIG_LVL
TRIG_INDIC
PAL_ST_LE
TRIGGER
-TRG_CLR
30MHZ
-30MHZ
U304B 74F74
U305A 74F74
U305B 74F74
U306A 74F74
U306B 74F74
-CAR
TRGSYNC
+15V
N501G 100X7
C302 .1U
U301C OPA2604
C303 .1U
N502G 100X7
-15V
R306 10
C304 2.2U-T35
U303B LT1016
GND
C305 *
R307 10
2.2U-T35
-5V

STANFORD RESEARCH SYSTEMS
1290-D Reamwood Ave.
Sunnyvale, CA 94089
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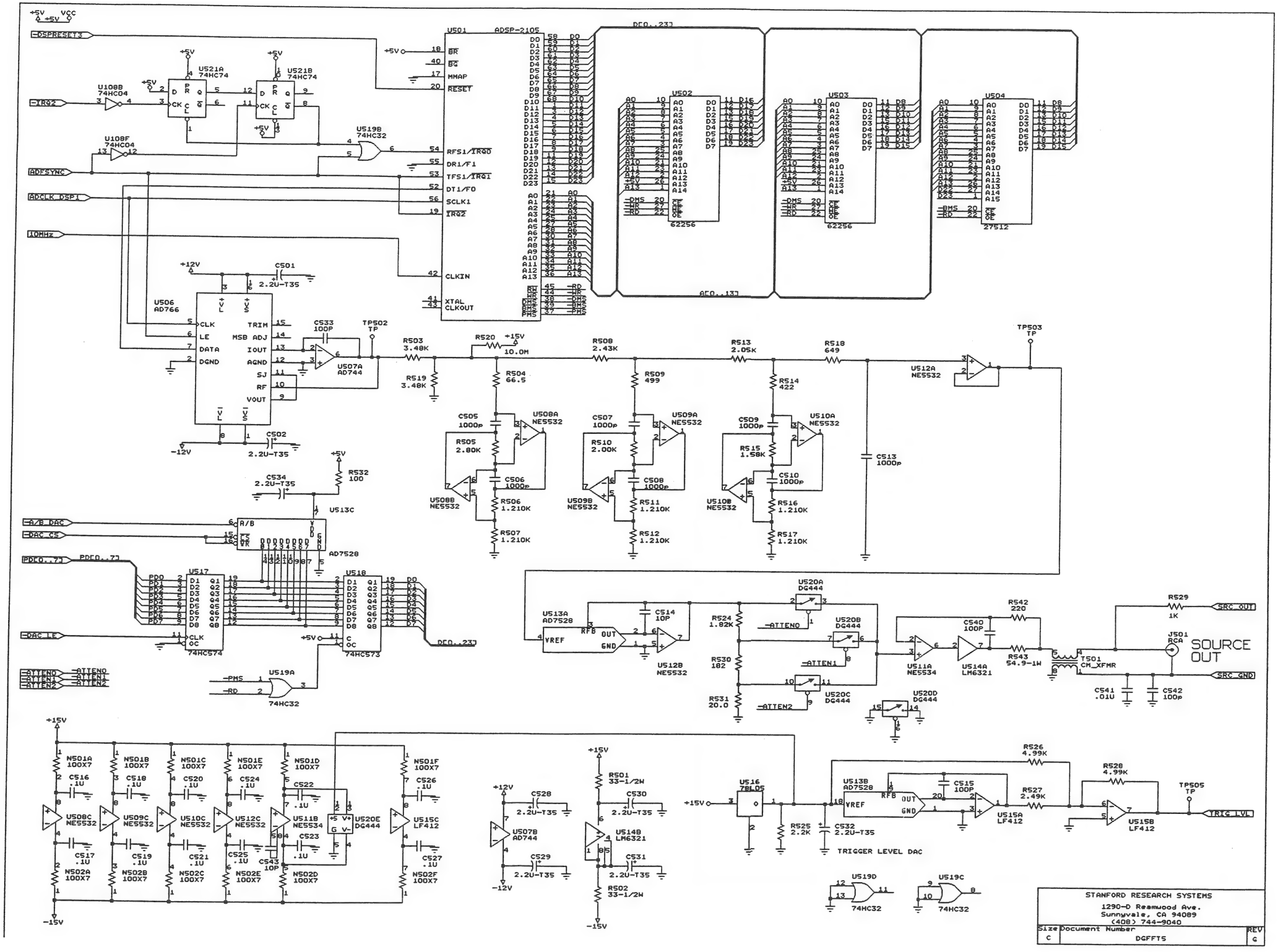
Title: EXTERNAL TRIGGER

Size	Document Number	REV
C	DGFFT3	G


-DSPRESET3
-IRQ2
ADFSYNC
ADCLK_DSP1
IOMHz
U501 ADSP-2105
U108B 74HC04
U108F 74HC04
U521A 74HC74
U521B 74HC74
U519B 74HC32
RFS1/IRQ0
DR1/F1
TFS1/IRQ1
DT1/FO
SCLK1
IRQ2
CLKIN
XTAL
CLKOUT
PDF0..23
U502
U503
U504
62256
62256
27512
U506 AD766
C501 2.2U-T35
C502 2.2U-T35
C533 100P
TP502 TP
U507A AD744
R503 3.48K
R519 3.48K
R520 10.0M
+15V
R508 2.43K
R513 2.05K
R518 649
TP503 TP
U512A NE5532
R504 66.5
R509 499
R514 422
C505 1000P
C507 1000P
C509 1000P
C513 1000P
U508A NE5532
U509A NE5532
U510A NE5532
R505 2.80K
R510 2.00K
R515 1.58K
C506 1000P
C508 1000P
C510 1000P
U508B NE5532
U509B NE5532
U510B NE5532
R506 1.210K
R511 1.210K
R516 1.210K
R507 1.210K
R512 1.210K
R517 1.210K
C534 2.2U-T35
R532 100
U513C
-A/B DAC
-DAC CS
AD7528
PDF0..7
U517
U518
74HC574
74HC573
-DAC LE
-ATTEN0
-ATTEN1
-ATTEN2
U519A
-PMS
-RD
74HC32
U513A AD7528
U512B NE5532
C514 10P
U520A DG444
U520B DG444
U520C DG444
U520D DG444
R524 1.82K
R530 182
R531 20.0
-ATTEN0
-ATTEN1
-ATTEN2
U511A NE5534
U514A LM6321
R542 220
R543 54.9-1W
C540 100P
T501 CM_XFMR
R529 1K
J501 RCA
SOURCE OUT
SRC_OUT
SRC_GND
C541 .01U
C542 100P
N501A 100X7
N501B 100X7
N501C 100X7
N501D 100X7
N501E 100X7
N501F 100X7
N502A 100X7
N502B 100X7
N502C 100X7
N502D 100X7
N502E 100X7
N502F 100X7
C516 .1U
C517 .1U
C518 .1U
C519 .1U
C520 .1U
C521 .1U
C522 .1U
C523 .1U
C524 .1U
C525 .1U
C526 .1U
C527 .1U
C543 10P
U508C NE5532
U509C NE5532
U510C NE5532
U512C NE5532
U511B NE5534
U520E DG444
U515C LF412
U507B AD744
C528 2.2U-T35
C529 2.2U-T35
R501 33-1/2W
R502 33-1/2W
C530 2.2U-T35
C531 2.2U-T35
U514B LM6321
U516 78L05
R525 2.2K
C532 2.2U-T35
TRIGGER LEVEL DAC
U513B AD7528
C515 100P
R526 4.99K
R527 2.49K
R528 4.99K
U515A LF412
U515B LF412
TP505 TP
TRIG_LVL
U519D 74HC32
U519C 74HC32
STANFORD RESEARCH SYSTEMS
1290-D Reamwood Ave.
Sunnyvale, CA 94089
(408) 744-9040
Size C
Document Number DGFFTS
REV G

PLATFORM CONNECTOR

40 PIN EDGE CONNECTOR
ODD PINS ON COMP SIDE
PIN 1 TOWARDS REAR

POWER CONNECTOR

60 PIN EDGE CONNECTOR
ODD PINS ON COMP SIDE
PIN 1 TOWARDS REAR

CUT TRACE FOR TWO CHANNEL USE

CUT TRACE FOR TWO CHANNEL USE

CUT TRACE FOR 2 CHANNEL USE

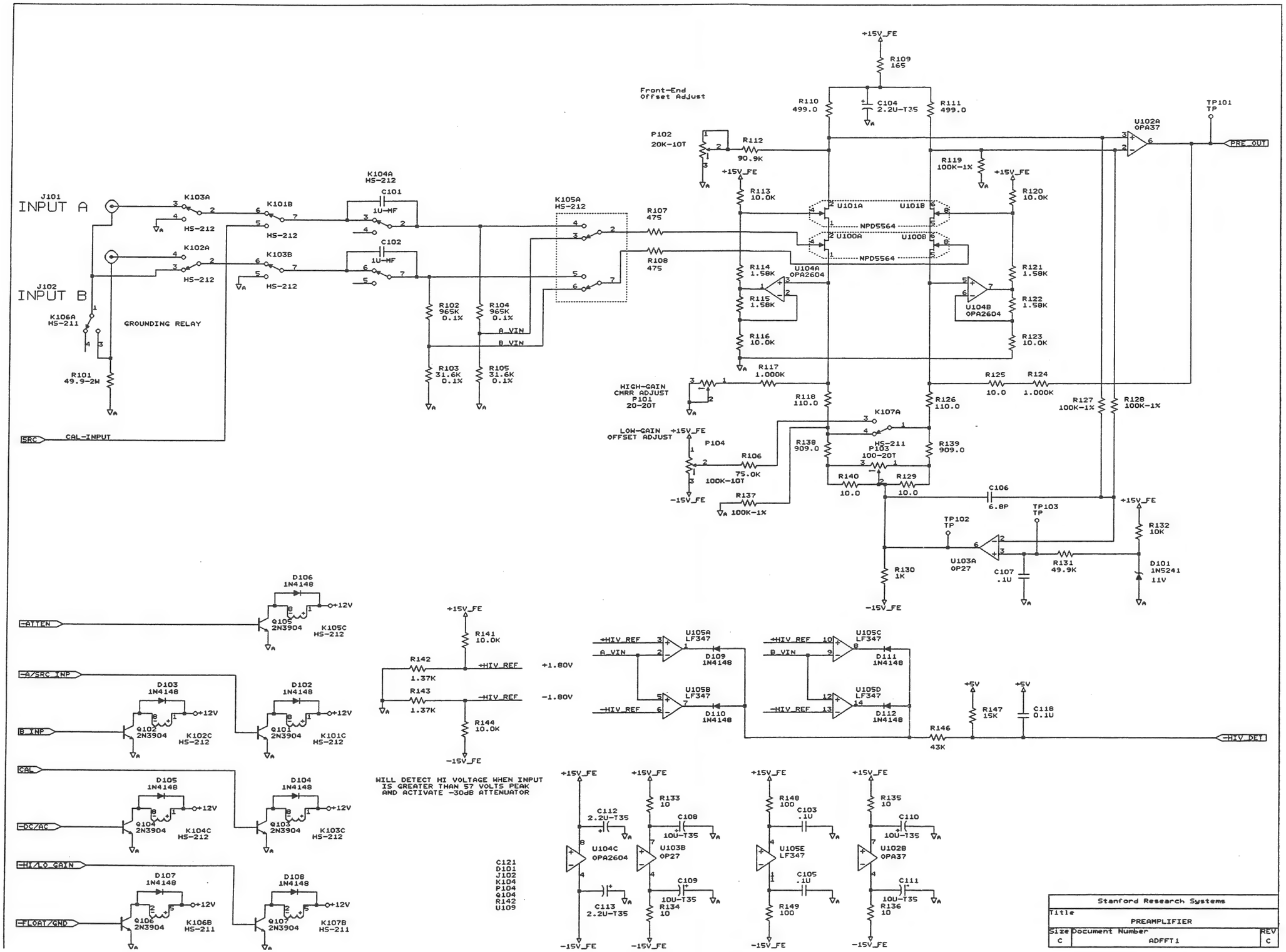
SPARE LATCH

TRIGGER INDIC INT
PLATFORM INT

STANFORD RESEARCH SYSTEMS
1290-D Reamwood Ave.
Sunnyvale, CA 94089
(408) 744-9040

Title: PLATFORM INTERFACE AND POWER

Size: C | Document Number: DGFFT6 | REV: C


J101
INPUT A
J102
INPUT B
K103A
K101B
K104A
HS-212
C101
1U-MF
K102A
K103B
C102
K105A
HS-212
K106A
HS-211
GROUNDING RELAY
R101
49.9-2W
SRC
CAL-INPUT
R102
965K
0.1%
R104
965K
0.1%
R103
31.6K
0.1%
R105
31.6K
0.1%
A_VIN
B_VIN
+15V_FE
R109
165
Front-End
Offset Adjust
R110
499.0
C104
2.2U-T35
R111
499.0
P102
20K-10T
R112
90.9K
R119
100K-1X
U102A
OPA37
TP101
TP
PRE_OUT
R113
10.0K
R120
10.0K
U101A
U101B
NPD5564
U100A
U100B
NPD5564
R107
475
R108
475
R114
1.58K
U104A
OPA2604
R115
1.58K
R116
10.0K
R121
1.58K
U104B
OPA2604
R122
1.58K
R123
10.0K
R117
1.000K
HIGH-GAIN
CMRR ADJUST
P101
20-20T
R118
110.0
R126
110.0
R125
10.0
R124
1.000K
R127
100K-1X
R128
100K-1X
K107A
LOW-GAIN
OFFSET ADJUST
P104
R106
75.0K
100K-10T
R138
909.0
HS-211
P103
100-20T
R139
909.0
R140
10.0
R129
10.0
R137
100K-1X
C106
6.8P
TP102
TP
TP103
TP
U103A
OP27
C107
.1U
R131
49.9K
R132
10K
D101
1N5241
11V
R130
1K
-15V_FE
D106
1N4148
Q105
2N3904
K105C
HS-212
+12V
-ATTEN
-A/SRC INP
D103
1N4148
Q102
2N3904
K102C
HS-212
B INP
D102
1N4148
Q101
2N3904
K101C
HS-212
CAL
D105
1N4148
Q104
2N3904
K104C
HS-212
-DC/AC
D104
1N4148
Q103
2N3904
K103C
HS-212
-HI/LO GAIN
D107
1N4148
Q106
2N3904
K106B
HS-211
-FLOAT/GND
D108
1N4148
Q107
2N3904
K107B
HS-211
R141
10.0K
R142
1.37K
+HIV_REF
+1.80V
R143
1.37K
-HIV_REF
-1.80V
R144
10.0K
WILL DETECT HI VOLTAGE WHEN INPUT
IS GREATER THAN 57 VOLTS PEAK
AND ACTIVATE -30dB ATTENUATOR
U105A
LF347
D109
1N4148
U105B
LF347
D110
1N4148
U105C
LF347
D111
1N4148
U105D
LF347
D112
1N4148
R146
43K
+5V
R147
15K
C118
0.1U
-HIV_DET
C112
2.2U-T35
R133
10
C108
10U-T35
U104C
OPA2604
U103B
OP27
C113
2.2U-T35
C109
10U-T35
R134
10
R148
100
C103
.1U
U105E
LF347
C105
.1U
R149
100
R135
10
C110
10U-T35
U102B
OPA37
C111
10U-T35
R136
10
C121
D101
J102
K104
P104
Q104
R142
U109
Stanford Research Systems
Title
PREAMPLIFIER
Size
C
Document Number
ADFFT1
REV
C

+5V VCC

PRE_OUT

+/- 10V MAX

-GAIN_C

U201A DG444

U203A OPA37

R203 8.06K

GAIN=5

R204 1.00K

GAIN=10

R205 1.00K

GAIN_C

GAIN_A

U202A 74HC04

TP201 TP

-60DB

U202B 74HC04

U204A DG444

U204B DG444

U205A OPA37

R206 9.09K

R207 1.00K

TP202 TP

U206A DG444

U202C 74HC04

U213A 74HC32

-60DB

GAIN_B

GAIN_C

U202D 74HC04

U213B 74HC32

-40DB

0 dB

-6 dB

R201 6.04K

+/- 5V MAX

R202 4.02K

U207B NE5532

TP206 TP

U213C 74HC32

-0DB

U202E 74HC04

U213D 74HC32

-6DB

GAIN_A

GAIN_C

TP203 TP

U207A NE5532

U208A DG444

R208 205

R209 162

R210 130

R211 102

-ATEN1

-ATEN2

-ATEN3

-ATEN4

U209A DG444

R212 82.5

R213 64.9

R214 249

-ATEN5

-ATEN6

-ATEN7

-ATEN8

TP204 TP

U210A NE5534

+/- 1V MAX

GAIN_OUT

U212 74HC138

ATEN1 ATEN2 ATEN3 ATEN4

+5V

GAIN_A GAIN_B GAIN_C

-ATEN1 -ATEN2 -ATEN3 -ATEN4 -ATEN5 -ATEN6 -ATEN7 -ATEN8

GAIN SETTING:

CBA	GAIN
000	14 dB
001	20 dB
100	34 dB
101	40 dB
110	54 dB
111	60 dB

OVERLOAD DETECT AT +/- 800 mV

+15V

R216 10.0K

R217 576

R218 576

R219 10.0K

U211 LM393

TP205 TP

-OVLD

C202 0.1U

-15V

U201E DG444

R250 100

R251 100

C250 .1U

C251 .1U

C252 .1U

R252 100

U204E DG444

R253 100

C253 .1U

R269 10

C270 2.2U-T35

U205B OPA37

C271 2.2U-T35

R270 10

U206E DG444

R256 100

C256 .1U

R265 10

C265 2.2U-T35

U207C NE5532

C266 2.2U-T35

R266 10

U208E DG444

R259 100

C259 .1U

R260 100

C260 .1U

R261 100

C261 .1U

U209E DG444

R262 100

C262 .1U

R263 100

C263 .1U

R264 100

C264 .1U

R267 10

C268 2.2U-T35

U203B OPA37

C269 2.2U-T35

R268 10

U210B NE5534

R271 10

C272 2.2U-T35

C273 2.2U-T35

C274 18P

R272 10

Title	GAIN STAGES	
Size C	Document Number ADFFT2	REV C

ANTI ALIASING FILTER

PASSBAND: DC-100KHZ
STOPBAND: 156 KHz
STOPBAND ATTENUATION: 100dB

GAIN_OUT

R301 2.74K / 1.575K
R302 0
R307 3.16K / 2.792K
R312 2.55K / 2.575K
R317 2.26K / 2.588K
R322 953 / 1.411K

R303 68.1 / 68.4
R308 383 / 388.8
R313 511 / 508.5
R318 249 / 249.4

C301 0.001U-NPO
C303 0.001U-NPO
C305 0.001U-NPO
C307 0.001U-NPO

R304 2.26K / 2.244K
R309 2.10K / 2.145K
R314 1.91K / 2.012K
R319 1.82K / 2.009K

U301A NE5532
U302A NE5532
U303A NE5532
U304A NE5532

C302 0.001U-NPO
C304 0.001U-NPO
C306 0.001U-NPO
C308 0.001U-NPO

U301B NE5532
U302B NE5532
U303B NE5532
U304B NE5532

R305 4.99K
R310 4.99K
R315 4.99K
R320 4.99K

R306 4.99K
R311 4.99K
R316 4.99K
R321 4.99K

U305A NE5534
TP301 TP

R323 1.47K
R324 4.99K
R325 1.00K

C309 0.001U-NPO

GAIN=2.75

R366 1.82K
R365 1.00K
U309A NE5532

TO TRIGGER COMPARATOR ON DIGITAL BOARD
F.S. = +/- 5V

ANTRG

+15V
R367 390-1/2W
D301 1N4148
D303 1N5225 3.0V

AAFILT_OUT

D302 1N4148
D304 1N5225 3.0V
R368 390-1/2W
-15V

U307B AD7542
VDD
CLR
DGND
RFB
VREF
OUT
GND
D0 D1 D2 D3 D4 D5 D6 D7

D1
D0
DAC_WR
DAC_CS
DC0..3J

+15V
R364 100
C363 .1U
U306 78L05
R326 2.2K
C310 2.2U-T35
+5V

TP302 TP

ANTI-ALIASING FILTER OFFSET ADJUST
P301 10K-20T

R327 20.0K
C311 100P
U307A AD7542
U308A LF412

R329 1.00K
R328 2.49K
U308B LF412
TP303 TP
+/- 10V

OFFSET DAC

+15V
R350 10
C350 2.2U-T35
U301C NE5532
C351 2.2U-T35
R351 10
-15V

R352 10
C352 2.2U-T35
U302C NE5532
C353 2.2U-T35
R353 10

R354 10
C354 2.2U-T35
U303C NE5532
C355 2.2U-T35
R355 10

R356 10
C356 2.2U-T35
U304C NE5532
C357 2.2U-T35
R357 10

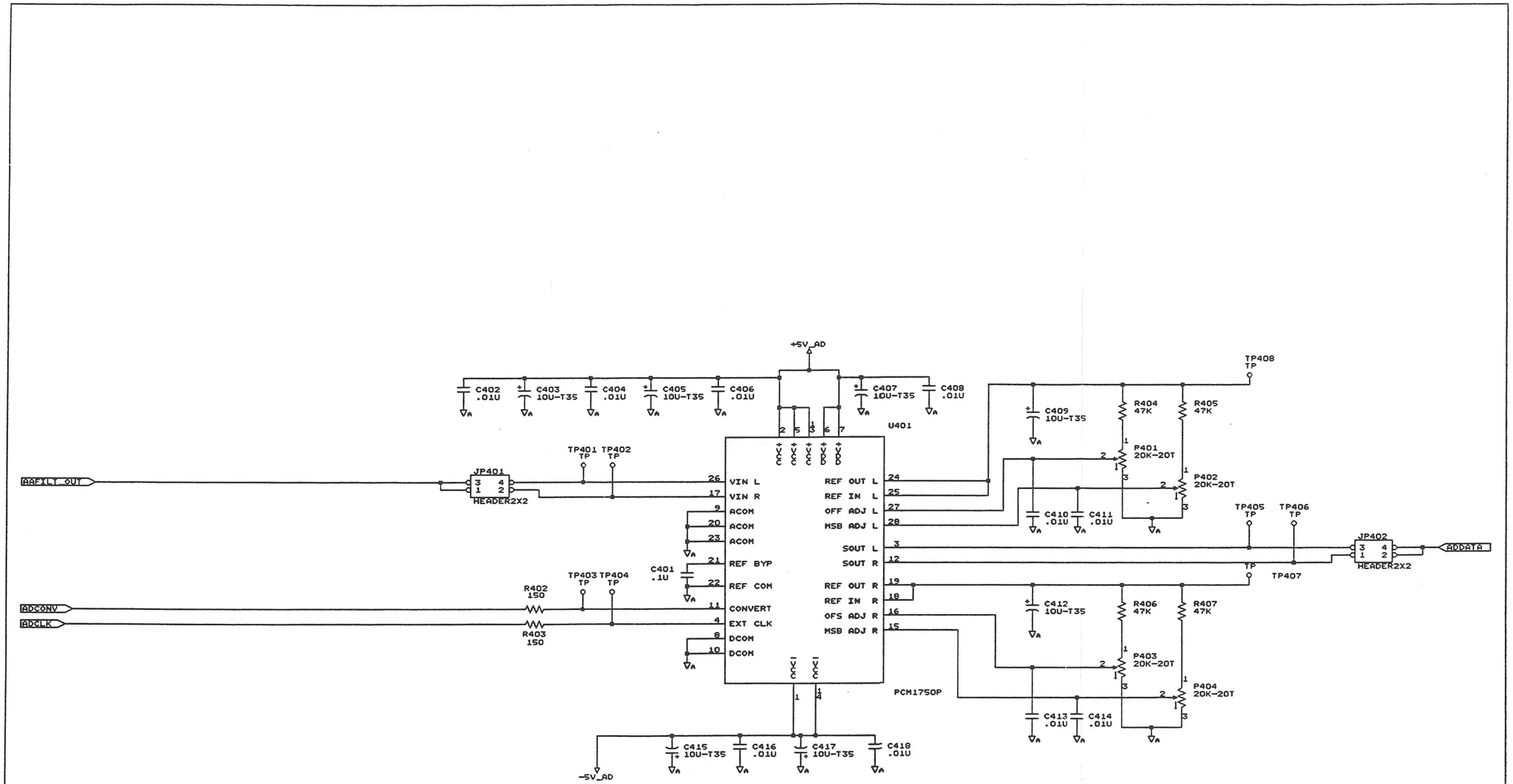
R358 100
C358 .1U
U308C LF412
C359 .1U
R359 100

R360 10
C360 2.2U-T35
U305B NE5534
C361 2.2U-T35
R361 10

R362 100
C364 .1U
U309C NE5532
C365 .1U
R363 100

U309B NE5532

Title: ANTI-ALIASING FILTER & DC OFFSET		
Size: C	Document Number: ADFFT3	REV: C



Stanford Research Systems		
Title	A/D CONVERTER	
Size C	Document Number ADFFT4	REV C

POWER CONNECTOR

60 PIN EDGE CONNECTOR
ODD PINS ON COMP SIDE
PIN 1 TOWARDS REAR

PLATFORM CONNECTOR

40 PIN EDGE CONNECTOR
ODD PINS ON COMP SIDE
PIN 1 TOWARDS REAR

BOARD ADDRESS

BYPASS CAPACITORS

UNUSED PARTS

UNUSED

Title	DIGITAL INTERFACE
Size C	Document Number ADFFT5
REV	C